

WHAT IS CLAIMED IS:

1. A security control apparatus comprising:
 - a security device;
 - a control apparatus responsive to security codes for enabling and disabling the security device;
 - a security code source unit for communicating security codes to the control apparatus, the security code source unit having a user controlled keypad and a voice analysis apparatus and including circuitry responsive to the voice analysis apparatus for communicating to the control apparatus a security code including a portion representing user interaction with the security code source unit.
2. A security control apparatus in accordance with claim 1, wherein the voice analysis apparatus comprises a speaker dependent voice analysis arrangement and a speaker independent voice analysis arrangement.
3. A security control apparatus in accordance with claim 1, wherein the security code source unit comprises memory for storing a pass code entered by a user in association with representations of speech generated by the voice analysis apparatus.
4. A security control apparatus in accordance with claim 3, wherein the circuitry for communicating responds to predetermined comparison characteristics between a stored speech representation and a spoken speech representation for communicating a security code.
5. A security control apparatus in accordance with claim 3, wherein a security code communicated to the control apparatus comprises a pass code entered by user interaction with the keypad.
6. A security control apparatus in accordance with claim 3, wherein a security code communicated to the

control apparatus comprises a pass code entered via the voice analysis apparatus.

7. A security control system comprising:

5 a speaker dependent voice analysis arrangement for indicating security approval or non-approval based on commands being spoken by a user;

10 a speaker independent voice analysis arrangement operative when the speaker dependent voice analysis arrangement indicates non-approval for providing speech analysis information based upon words being spoken by the user; and

15 security control apparatus responsive to representations of an indication of security approval by the speaker dependent voice analysis arrangement for generating a security approval signal or responsive to representations of speaker independent voice analysis information for generating a security approval signal.

20 8. A security control system in accordance with claim 7, comprising:

25 apparatus responsive to speaker dependent security approval for transmitting a security code comprising a predetermined passcode to the barrier movement apparatus and the security control apparatus comprises apparatus for generating the security signal in response to the predetermined passcode.

9. A security control system in accordance with 30 claim 8, wherein the words spoken by the user comprise a passcode and the speaker independent voice analysis arrangement identifies the passcode and transmits the identified passcode to the security control apparatus.

35 10. A security control system in accordance with claim 7, comprising apparatus operative during a learn mode for storing speech representations of a first user's voice speaking the commands;

memory for storing the speech representations.

11. A security control system in accordance with
claim 7, wherein the speaker dependent voice analysis
apparatus is adapted to receive input representing a
passcode and apparatus for storing the passcode
representations input by the user in association with the
stored speech representations.

10 12. A security code transmitter comprising:
 a keypad responsive to user interaction for
generating a pass code;
 a voice analysis arrangement responsive to
spoken commands for transmitting security codes including
15 the pass code;
 a cover mounted on the security code
transmitter; and
 apparatus responsive to force applied to the
cover for enabling the voice analysis arrangement.

20 13. A security code transmitter in accordance with
claim 12 wherein the cover is movably mounted on the
transmitter and the apparatus responsive to forces
applied to the cover comprises a switch.

25 14. A security code transmitter in accordance with
claim 13, wherein the switch exhibits at least two states
and is disposed on the security code transmitter in a
position to change state when the cover is moved to a
30 position to uncover the keypad.

15. A security code transmitter in accordance with
claim 13, wherein the cover comprises a pivoting
attachment to the security code transmitter, the pivoting
attachment permitting an open position where the keypad
is accessible to the user, a first closed position in
which the keypad is inaccessible to the user and the
switch is in a first state and a second closed position

in which the keypad is inaccessible to the user and the switch is in a second state.

16. A security code transmitter in accordance with
5 claim 15, comprising circuitry responsive to the state of
the switch for enabling the voice analysis arrangement.

17. A security code transmitter in accordance with
claim 16, wherein the second closed position is farther
10 from the open position than the first closed position and
the voice analysis apparatus is enabled when the cover is
in the second closed position.

18. A barrier movement apparatus comprising:
15 a control arrangement responsive to security
codes for moving the barrier; and
a security code transmitter comprising:
voice analysis apparatus responsive to
spoken commands for sending a security code to the
20 control arrangement upon approval of the command spoken
by a user;
a cover having an open and a closed
position;
circuitry responsive to the position of
25 the cover for enabling voice analysis by the voice
analysis apparatus.

19. A barrier movement apparatus in accordance
with claim 18, wherein the circuitry responsive to the
30 position of the cover comprises an electrical switch.

20. A barrier movement apparatus in accordance
with claim 19, wherein the circuitry for transmitting is
actuated upon movement of the cover to a maximum closed
35 position.

21. A barrier movement apparatus in accordance with
claim 18, wherein the circuitry responsive to the

position of the cover is enabled for a predetermined period of time after a security code is transmitted.

22. A barrier movement apparatus in accordance with
5 claim 20 wherein the security code transmitter comprises apparatus responsive to a movement of the cover to the maximum closed position while the circuitry responsive to the cover position is enabled for sending a security code to stop barrier movement.

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23. A barrier movement apparatus comprising:
barrier control apparatus responsive to barrier control commands for moving a barrier;
control circuitry responsive to user
15 interaction for generating barrier control commands to control barrier movement, said user interaction comprising security approval before the generation of barrier control commands;
voice analysis arrangement responsive without
20 security approval to at least one predetermined word spoken by a user for generating barrier control commands to change the movement of a barrier.

24. A barrier movement apparatus in accordance
25 with claim 23 wherein the control circuitry enables the voice analysis arrangement for a predetermined period of time after the generation of a barrier control command to respond without security approval to the at least one spoken word to stop a closing barrier.

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25. A barrier movement apparatus in accordance with claim 23, wherein the control circuitry comprises a speaker dependent voice analysis arrangement for granting security approval.

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26. A barrier movement apparatus comprising:
a motor responsive to barrier control commands for operating the barrier;

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a speaker dependent voice analysis apparatus responsive to a first predetermined spoken command from a predetermined speaker for controlling the motor to operate the barrier; and

5 speaker independent voice analysis apparatus responsive to a second spoken command from any speaker for changing barrier movement.

10 27. A barrier movement apparatus according to claim 26, wherein the speaker independent voice analysis apparatus is enabled for a predetermined period of time after the motor is directed to operate the barrier.

15 28. A barrier movement apparatus according to claim 27, wherein the speaker independent voice analysis apparatus is enabled for a predetermined period of time after the motor is controlled to operate the barrier, to reverse barrier movement.

20 29. A barrier movement apparatus according to claim 27, wherein the speaker independent voice analysis apparatus is enabled for a predetermined period of time after the barrier control apparatus is controlled to move the barrier, to stop movement of the barrier.

25 30. A barrier movement apparatus comprising:
a control apparatus responsive to security codes for moving and stopping the barrier;
a speaker dependent voice analysis arrangement responsive to a predetermined command spoken by a predetermined user for communicating a security code to the control apparatus.

35 31. A barrier movement apparatus in accordance with claim 30, wherein the speaker dependent voice analysis arrangement comprises memory for storing a general security code portion and a user specific security code portion in association with indicia of the predetermined

command spoken by the predetermined user and the communicated security code comprises the general security code portion and a user specific security code portion.

5 32. A barrier movement apparatus in accordance with claim 31, wherein the memory comprises memory locations for storing a plurality of user specific security code portions.

10 33. A barrier movement apparatus in accordance with claim 31, wherein the speaker dependent voice analysis arrangement comprises a keypad for generating a pass code representing user interaction with the keypad and the memory stores the user generated pass code as the user 15 specific security code portion.

20 34. A barrier movement apparatus in accordance with claim 33, comprising apparatus responsive to a voice of the predetermined user for storing a representation of the predetermined user's voice in association with a pass 25 code representing user interaction with the keypad.

30 35. A barrier movement apparatus in accordance with claim 32, wherein the memory comprises a first plurality of locations for storing semipermanent user specific code portions intended to be changed by user interaction and a second plurality of temporary user specific code portions which are intended to be erased upon the occurrence of an event.

35 36. A barrier movement apparatus in accordance with claim 35, wherein the temporary user specific security code portions are erased in response to the passage of a predetermined amount of time.

37. A barrier movement apparatus in accordance with claim 35, wherein the temporary user specific

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security code portions are erased in response to a predetermined number of accesses.

comparing as sufficiently similar to the received biometric characteristic representation.